Application No. 10/585,722 Docket No.: 568-PDD-03-13-US-[58P]

Amendment dated June 17, 2010 After Final Office Action of February 22, 2010

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

(Currently amended) An implant comprising:

a tubular metal stent defining a lumen centered on a central longitudinal axis,
the stent being radially expansible from a radially compact delivery
configuration to a radially larger deployed configuration, and

a plurality of electrically-conductive closed loops comprising struts forming an apertured wall of the stent implant with an interior volume, each of said loops being formed from strut loop portions providing electrically-conductive current pathways within which eddy currents are liable to be induced when subjected to a time-dependent external magnetic field, each of said loops including a first current pathway and a second current pathway wherein said first current pathway and said second current pathway are arranged such that, regardless of the direction of said external magnetic field, the direction of the eddy current that would be induced by said field in said second current pathway is the reverse of the direction of the eddy current that would simultaneously be induced by said field in said first current pathway, thereby to prevent flow of eddy currents in each of said loops_thereby mitigating a Faraday Cage effect and rendering the lumen visible to MRI.

 (Currently amended) The implant according to claim 1, wherein each of said loops has <u>strut</u> loop portions formed as a first lobe and as a second lobe of a figure of eight, further comprising a cross-over point between said first lobe and said second lobe. Application No. 10/585,722 Docket No.: 568-PDD-03-13-US-[58P]
Amendment dated June 17, 2010

After Final Office Action of February 22, 2010

3. (Previously presented) The implant according to claim 2, further comprising

an electrically-insulating joint between said two loop portions at said cross-over point.

4. (Original) The implant according to claim 2, wherein each of said loops has

additional lobes and additional cross-over points between said additional lobes, with the areas

bounded by the lobes being such that, in aggregate, the area bounded by one set of lobes equals the

area bounded by a cancelling remainder of the lobes.

(Canceled).

6. (Previously presented) The implant according to claim 1, wherein each of

said loops wraps around an axis in the form of a spiral with an integral whole number of turns.

7. (Original) The implant as claimed in claim 6, the integral whole number of

turns being at least three.

(Canceled).

9. (Original) The implant according to claim 6, wherein each of said loops

wraps around the axis in a path that spirals around the axis from one end of the implant to the other.

(Original) The implant according to claim 6, wherein the pitch of said spiral

path is constant.

11. (Original) The implant according to claim 1, wherein loop portions

correspond to struts that are joined end-to-end to each other and can deploy in use to form a zig-zag

pattern.

12. (Original) The implant according to claim 1, with the plurality of loops

arranged mutually axially adjacent, and spaced along the axis.

13. (Original) The implant according to claim 12, wherein adjacent loops are

connected to each other by electrically-insulating links.

3

Application No. 10/585,722 Docket No.: 568-PDD-03-13-US-[58P]
Amendment dated June 17, 2010

After Final Office Action of February 22, 2010

14. (Original) The implant according to claim 1, wherein each of said loops

includes a plurality of electrically-insulating links that connect spaced loop portions of said loop.

15. (Original) The implant according to claim 13, wherein each link is a

mechanical coupling with a first cooperating link portion and a second cooperating link portion.

16. (Original) The implant according to claim 15, wherein the cooperating

portions can move relative to each other.

17. (Original) The implant according to claim 16, wherein the cooperating

portions are constituted as a hook portion and an eye to receive the hook portion.

18. (Original) The implant according to claim 15, including a layer of bonding

material between the cooperating link portions.

19. (Original) The implant according to claim 18, wherein the bonding material

is ceramic.

20. (Original) The implant according to claim 18, wherein the bonding material

is an adhesive composition.

21. (Original) The implant according to claim 15, wherein the mechanical

coupling comprises interlocking fingers.

22. (Original) The implant according to claim 15, wherein the mechanical

coupling comprises mechanically-engaging surfaces in combination with at least one restraining

strap overlying the engaging surfaces.

23. (Original) The implant according to claim 13, wherein each link includes a

molded connector piece.

24. (Original) The implant according to claim 13, wherein each link includes a

portion that is locally thinned with respect to the thickness of the wall of the implant.

4

Application No. 10/585,722 Docket No.: 568-PDD-03-13-US-[58P]

Amendment dated June 17, 2010 After Final Office Action of February 22, 2010

25. (Canceled).

26. (Original) The implant according to claim 1, wherein the implant is made of

nickel-titanium shape memory alloy.

27. (Original) The implant according to claim 1, wherein the implant is made of

stainless steel.

28-33. (Canceled).

34. (Currently amended) The implant according to claim 1, wherein each closed

loop exhibits lobes, with an equal lobe area on opposite sides of the stent interior volume.

35. (Currently amended) An implant tube comprising:

a tubular metal stent defining a lumen centered on a central longitudinal axis,
the stent being radially expansible from a radially compact delivery

configuration to a radially larger deployed configuration, the stent

comprising an electrical conductor, said electrical conductor having a

plurality of closed loops comprising struts electrically insulated from

each other, each of said closed loops having a periphery of a string of

equal area strut lobes that are within said closed loop, and every one

of said <u>strut</u> lobes having a counterpart <u>strut</u> lobe located diametrically opposite on the stent, the electrical conductor mitigating a Faraday

Cage effect to permit imaging of the lumen by MRI implant tube.

36. (Currently amended) The implant tube according to claim 35, wherein each

of said $\underline{\text{closed loops include}}$ $\underline{\text{loop having}}$ an even number of $\underline{\text{strut}}$ lobes.

5